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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,770	02/20/2004	Sheng Hsin Liao	MR1957-854	3781
4586	7590	10/05/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			TSUKERMAN, LARISA Z	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,770

Applicant(s)

LIAO, SHENG HSIN

Examiner

Larisa Z Tsukerman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Attachments 1-3</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 1, lines 9-10, a phrase “retained against the orientation member to be oriented” is confusing.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin et al. (5967801).

In regard to claim 1, Martin et al. discloses a plug structure 10 comprising:

a base 40 defining a receiving **cavity 16** formed therein and a plurality of **slots 58** formed in a front thereof to communicate with the receiving cavity 16, the base 12 including **a member** (not marked, see Fig.5, the bottom part of base 12) disposed on an exterior side thereof;

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including **a member** (not marked, see Fig.5, the bottom part of base 12) disposed on an exterior side thereof;

a plurality of contacts 48 arranged in the slots 58;

a connection member 51, 55 defining a plurality of slits (not marked, see Fig.3 and 4) formed in a front thereof, the connection member 51, 55 including an orientation member 55 disposed thereon; and

a plurality of conduction cords 11 receiving in the slits and retained against the orientation member 55 to be oriented, wherein the connection member 51,55 is disposed in the receiving cavity 16, and the contacts 48 are pressed in the slots 58 to pierce into the conduction cords for electrical connection.

In regard to claim 12, Martin et al. disclose the orientation member 55 has a plurality of partitions PP (see **Attachment 1**) arranged on an interior surface thereof to separate the conduction cords 11, respectively.

In regard to claim 14, Martin et al. disclose each conduction cord is a flat wire 11.

Claim 1, 3, 4, 6, 7 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfel (4516822).

In regard to claim 1, Wolfel discloses a plug structure 10 comprising:

a base (not marked) defining a receiving **cavity** 14 formed therein and a plurality of **slots** 22 formed in a front thereof to communicate with the receiving cavity 14, the base including **a member** 11 disposed on an exterior side thereof;

a plurality of contacts 20 arranged in the slots 22;

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a connection member 30 defining a plurality of slits 42 formed in a front thereof, the connection member 30 including an orientation member 60 disposed thereon; and

a plurality of conduction cords 6 receiving in the slits 42 and retained against the orientation member 60 to be oriented, wherein the connection member 30 is disposed in the receiving cavity 14, and the contacts 20 are pressed in the slots 22 to pierce into the conduction cords for electrical connection.

In regard to claim 3, Wolfel discloses the contacts 20 respectively have needle portion (not marked, see Fig.5) arranged at ends thereof, piercing and electrically connecting the conduction cords 11, respectively.

In regard to claim 4, Wolfel discloses the connection member 30 includes a sidewall (not marked, a wall near numerals 54 and 52) defining an aperture 52 adjacent to and communicating with the slits 42, and the conduction cords 6 are arranged in the slits 42 via the aperture 52.

In regard to claim 6, Wolfel discloses the connection member 30 includes a hollow shell 55, 52, 54 disposed at a rear thereof, the orientation member is adjacent to the hollow shell and the slit, and the conduction cords 6 penetrate the hollow shell into the slit.

In regard to claim 7, Wolfel discloses the connection member 30 has a recessed cavity RC (see **Attachment 2**) formed therein adjacent to the hollow shell 55, 52, 54 and communicating with the slits 42, the orientation member 60 is disposed above the recessed cavity RC, and the hollow shell 55, 52, 54 of the connection member 30 has two outlets TO (see **Attachment 2**) relatively formed on a rear and a front thereof.

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In regard to claim 15, Wolfel discloses each conduction cord 6/8 is a round wire (see Col. 1, lines 22-23 and 36-38), **but** not shows the conduction cords connect to a socket, the socket includes an engaging portion arranged on each lateral side thereof, and the engaging portion engages and connects with an engaging slot correspondingly formed on the connection member.

Official Notice is taken with regard to claim 15 since it is well known in the art to use a strain relief structure in order to hold the wires.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfel (4516822) in view of Vaden (4431246).

In regard to claim 5, Wolfel discloses most of the claimed invention except for the sidewall includes two guiding inclined surfaces formed on two opposing sides adjacent to the aperture, and the aperture is split and narrower than the slit. Vaden teaches sidewall SW (not marked, see **Attachment 3**) includes two guiding inclined surfaces GIS (not marked, see **Attachment 3**) formed on two opposing sides adjacent to the aperture A (not marked, see **Attachment 3**), and the aperture A is split and narrower than the slit S. Therefore, it would have been obvious to one having ordinary skill in the

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surfaces formed on two opposing sides adjacent to the aperture, narrower than the slit in Wolfel structure as taught by Vaden in **order to retain the a wire.**

Claims 8-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfel (4516822) in view of Martin et al. (5697801).

In regard to claim 8, 10 and 16, Wolfel discloses most of invention **including** the orientation member 60 is capable of being lifted or covered thereby, and the orientation member 60 is secured by a lock unit 66 when the orientation member 60 is covered, **except for** the orientation member 60 includes **a resilient juncture portion (or detachable, or an end** connecting the connection member) made integrally in one piece from the connection member 30. Martin et al. teaches in one of embodiments (see Fig.5) an orientation member OM includes **a resilient juncture** portion RJP made integrally in one piece from the connection member 61. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify an orientation member of Wolfel by including **a resilient juncture** portion RJP made integrally in one piece from the connection member 61 as taught by Martin et al in **order to prevent losing a separated piece.**

In regard to claim 9, Wolfel discloses the lock unit includes an orientation pillar 64 connecting the orientation member 60 and a secured hole 54 formed in the connection member 30, and the orientation pillar 64 inserts into the secured hole 54 when the orientation member 60 is covered.

In regard to claim 11, Wolfel discloses the lock unit includes an orientation pillar 64 disposed on each lateral side of the orientation member 60 and a secured hole 54 formed in the connection member 30 to communicate with the recessed cavity RC (**see Attachment 2**) and corresponding to the orientation pillar 64, and the orientation pillar 64 inserts into the secured hole 54 when the orientation member 60 is covered.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfel (4516822).

In regard to claim 13, Wolfel discloses most of the claimed invention except for each partition P is an elongated strip or cylinder.

The partition P having a structure like a cylinder, absent any criticality, is only considered to be an obvious modification of the shape of the partition disclosed by Wolfel, as the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149USPQ 47 (CCPA 1976).

Allowable Subject Matter

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

In regard to claim 2, The prior Art does not teach or suggest the plug RG having a buckling portion disposed on a side in the receiving cavity, and the buckling portion **is capable of being pressed on the orientation member of the connection member.**

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cocco et al. (4950176), Laub et al. (6706970), Su et al. (5505638), Pocrass (6764333), Chang (6682363), Ezawa (5899770), Maegawa (6388191), Wu (6663415), Bixler et al. (4713023), Ferril et al. (6116943), Lin (6250949), Watanabe (830005), Chen (6406325), Durand et al. (6375491), Bofill et al. (5888100).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larisa Z Tsukerman whose telephone number is (571)-272-2015. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on (571)-272-2800 ex. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT
08/31/2004



TRUCT. NGUYEN
PRIMARY EXAMINER